



Hurricane Harvey 2017
9/9/2017 – 0700 CDT Update

EXECUTIVE SUMMARY

- Texas Governor Greg Abbott is traveling to Beaumont today, September 9, 2017. He will be accompanied by EPA Senior Advisor to the Administrator Kell Kelly.
- The Texas Department of Agriculture signed pesticide applicator certification waivers on September 8, 2017 for Department of Defense (DOD) certified applicators that will be conducting aerial applications as soon as the evening of September 9, 2017.
- The Texas Department of State Health Services (TX DSHS) requested that FEMA coordinate with the U.S. Department of Agriculture for a rapid response for messaging to Certified Organic Farmers that may be affected by aerial spray operations. TX DSHS is concerned that this unresolved issue will result in some counties electing not to have aerial spray operations conducted. There are reports from the State Operations Center that Certified Organic Farmers are concerned that the spraying could cause them to lose their certification, and are therefore threatening to seek legal action to halt spraying activities.
- EPA issued a press release on September 8, 2017 regarding the events at the Arkema Plant in Crosby, Texas. EPA and TCEQ provided direct support to the Crosby Volunteer Fire Department and the Harris County Fire Marshall's Office who led the coordinated effort. The ASPECT aircraft and TAGA mobile laboratory monitored in the facility and found no exceedances of the Texas comparison values. The State still has an open investigation into the Arkema incident and will evaluate any impact due to the fires at the site. EPA directed Arkema to provide a detailed timeline of events and to respond to several questions.
- There has been significant focus on air quality monitoring in certain areas in Houston near the Valero Houston Refinery and in the Manchester neighborhood. EPA issued a press release on September 8, 2017 regarding real-time air monitoring data results collected by the TAGA mobile laboratory. EPA inspection of the site confirmed that a leak at the facility had occurred and the company took action to respond and repair the leak. Air monitoring results did not indicate any levels of concern. Data results have been posted online.
- Four Region 6 enforcement field personnel deployed to Houston on Friday, September 8, 2017 to conduct air monitoring in the Manchester neighborhood of Houston, in conjunction with TCEQ. EN is compiling and reviewing data received from Houston Health Department and TCEQ.

- Force Majeure notifications continue to be received by Region 6. The Region 6 Compliance Assurance and Enforcement Division is reviewing Force Majeure notifications as they are received.
- Region 6 responded to the TCEQ inquiry related to burning of woody debris and concurred with the use of the Hurricane Debris Management Guidance posted on TCEQ's website. In addition, EPA recommended the state consider particulate monitoring (PM₁₀) in areas of temporary debris management sites.
- Community Liaison deployments continue to assist impacted counties by providing information about environmental and health challenges associated with returning to flood damaged homes.
- EPA expects to receive an amended mission assignment today providing additional funding to continue response operations.
- Office of Emergency Management Director Reggie Cheatham and a representative from the Office of Management and Budget will visit the Region 6 REOC on Sunday, September 10, 2017 and will also visit Addison, Texas to view the ASPECT aircraft and receive a briefing on ASPECT capabilities and contributions to this response. They will travel to Houston on Monday, September 11, 2017 to tour EPA's command post, Houston laboratory, and the San Jacinto Superfund site.
- On September 8, 2017, EPA learned of a potential overflight being planned by NASA over areas of Houston where air quality has been a concern. Region 6 elevated this to EPA HQ to ensure effective interagency coordination.
- EPA continues to coordinate with the Texas Department of State Health Services regarding the need for residential well testing. Based on conversations at the JFO, a state request for a mission assignment for this work appears unlikely.

PUBLIC AFFAIRS

The EPA Liaison to the City of Houston Mayor's Office provided an update on EPA operations to Mayor Turner at the Emergency Operations Center's Senior Leadership meeting Friday September 8, 2017. This was the final Senior Leadership meeting, as several city departments will be returning to normal hours and operations. The remaining agencies and departments are expected to conclude operations at the Emergency Operations Center on Sunday September 10, 2017. The EPA Liaison will demobilize on Monday September 11, 2017.

Community Liaisons (CLs) continue to be deployed to impacted areas. Tasks will include touching base with various response organizations in the 39 declared counties and providing information for use in the recovery process. By September 10, 2017, a total of 39 CLs will be in the community.

DEBRIS RECOVERY

EPA currently has no mission assignment for debris recovery operations.

AIR MONITORING

EPA deployed four air quality technical specialists to Houston on September 8, 2017. The specialists will conduct surveillance in the Manchester area to evaluate potential sources of volatile organic compounds and benzene that have been detected in the area recently. They will perform air monitoring, evaluate data and conduct facility assessments, as appropriate. This activity is being conducted in partnership with TCEQ.

EPA's TAGA mobile laboratory is currently non-operational due to a technical malfunction. Replacement parts and a technician are en route and repairs are expected to occur today. A second EPA TAGA is en route from Las Vegas, Nevada.

EMERGENCY RESPONSE

Daily/Cumulative Summary of Hazard Evaluations/Recovery				
Status	Opened		Closed	
	9/7/2017	Number of Targets Remaining Open	9/7/2017	Cumulative
Corpus Christi Branch	1	28	9	86
Houston Branch	41	234	0	27
Port Arthur/Beaumont Branch	13	48	1	7
NRC Reports	0	3	0	0
TOTALS	55	313	10	120

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

Daily/Cumulative Summary of Spills/Discharges				
Status	Opened		Closed	
	9/7/2017	Cumulative	9/7/2017	Cumulative
Corpus Christi Branch	15	449	24	140
Houston Branch	4	97	3	36
Port Arthur/Beaumont Branch	3	23	0	9
NRC Reports	3	99	4	36
TOTALS	25	668	31	221

FIELD RESPONSE ACTIVITIES

FIELD TEAMS ON 9/8/2017				
Teams	Alpha	Bravo	Charlie	TOTAL
Hazard Evaluation	3	24	8	35
Oil Discharge Assessment	1	6	0	7
ER/Orphan Container Recovery	2	1	1	4
Oil/Vessel Recovery	5	0	0	5
Staging Areas	1	1	0	2
Air Operations	0	1	0	1
Air Monitoring	0	3	0	3
Water Infrastructure Assessment – Drinking Water	0	10	1	11

Water Infrastructure Assessment – Wastewater	0	5	0	5
TOTAL	12	51	10	73

CORPUS CHRISTI BRANCH:

Oversight of fuel transfer of Signet Enterprise continued, with a total of 79,000 gallons being transferred to date. The Oil Discharge Assessment Team will be on the scene tomorrow to oversee the removal process of all waste oil and to complete a final assessment.

Five Oil Discharge Recovery Teams coordinated and monitored responsible-party-led operations in Island Moorings, Rattle Snake Point, Ingleside, Seadrift, Harbor of Refuge, and Holiday Beach. In preparation of the signing of the Unified Command Approved Vessel Removal Protocols, the teams within the Oil Discharge Recovery Group prioritized sites for removal.

Three Hazard Evaluation (HE) Teams conducted assessments in the Rockport area. HE Teams traveled by boat to the Voestalpine facility in San Patricio County and assessed the drainage area behind the Voestalpine unloading dock. Soil/sediment samples were collected at three locations at the site and one location in the Corpus Christi Bay near a storm drain that discharges into the bay. An HE Team assessed the Copano Bay area for orphan containers.

An inventory of all 113 recovered items was completed on the staging pad in preparation for field screening.

	CONTAINERS			Cylinders	TOTAL
	Drums [55 gals]	Small Containers [<55 gals]	Large Containers [>55 gals]		
9/7/2017	4	0	1	5	10
TOTAL TO DATE	57	31	8	17	113

HOUSTON BRANCH:

Four EPA Region 6 air quality technical specialists deployed to Houston on September 8, 2017. Two air quality technical specialists teamed up with TCEQ investigators and made entry to the Valero Houston Refinery. They viewed Tank 3 with the failed roof and Tank 228 with the pinhole leak in the drain line. Valero estimates that Tank 228 will be emptied and degassed by next week. Tank 3 is the more problematic of the tanks as liquid has collected on the crumpled roof. The tank is still unsafe to empty and inspect. There is no estimate yet as to when that tank will be emptied and inspected. EPA and TCEQ recommended that Valero conduct perimeter monitoring in the interim.

The Air Recon Team conducted an aerial overflight of Bastrop, Lee and Fayette Counties, and the Brazos River in Fort Bend County with nothing significant to report. They did identify three sunken sailing vessels with no evidence of a discharge near Galveston Island. The Air Recon Team also assessed a reported sheen. It did not appear to be an ongoing discharge; however, the site will not be closed until further assessment can be conducted. The area is currently inaccessible except by boat or aircraft.

Twenty-four HE Teams conducted and completed assessments in Brazoria, Matagorda, Harris, and

Galveston Counties. There were no emergent or substantial risks posed by identified sites.

HE Assessment Status: 100% complete in Liberty, Austin, Waller, Chambers, Montgomery, Fort Bend, Galveston, Bastrop, Lee, Fayette, Colorado and Walker Counties; 90% complete in Brazoria County; 80% complete in Wharton County; 60% complete in Harris County; and 30% complete in Matagorda County.

During the day's assessment it was observed that the Matagorda and Brazos Rivers had finally crested.

EPA's ASPECT aircraft conducted assessments over the Beaumont area and the State's special site list.

PORT ARTHUR/BEAUMONT BRANCH:

Eight HE Teams conducted assessments in Pleasure Island, China, Nome, Beaumont, the Neches River, Sour Lake, the Sabine River and Taylor Bayou. No emergent or substantial risks were posed from identified sites.

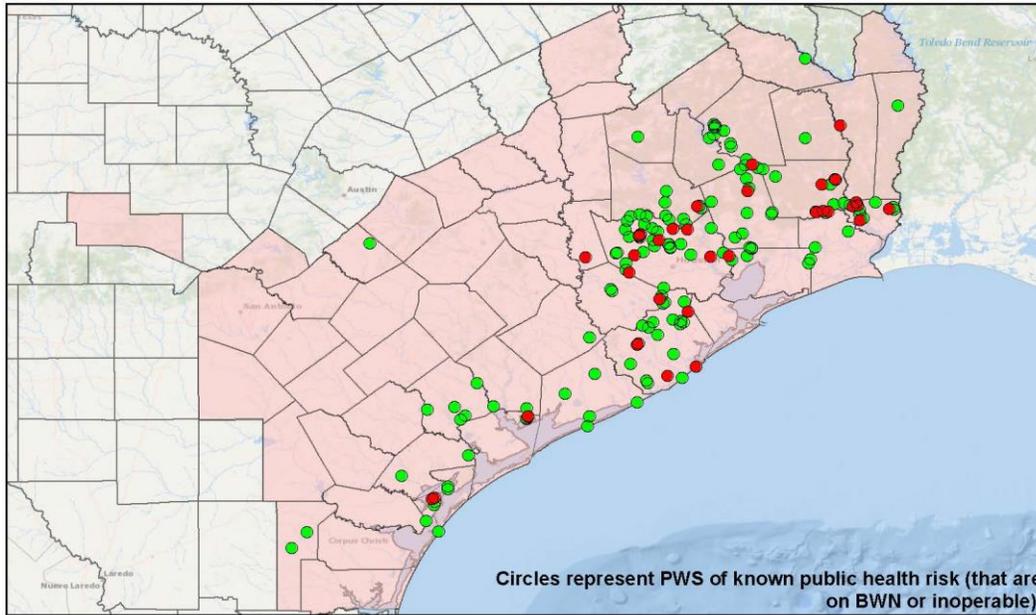
The Discharge Assessment Team reported 125 gallons of diesel fuel was discharged at the maintenance facility outside of the Beaumont Federal Prison. The source was secured and the spill removed by an Oil Spill Removal Organization.

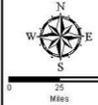
A Hazard Evaluation Team reported a natural gas leak in Vidor, Texas. The responsible party was identified as PRO Gas. EPA oversaw the securing of the leak by a PRO Gas technician.

DRINKING WATER / WASTEWATER ASSESSMENTS

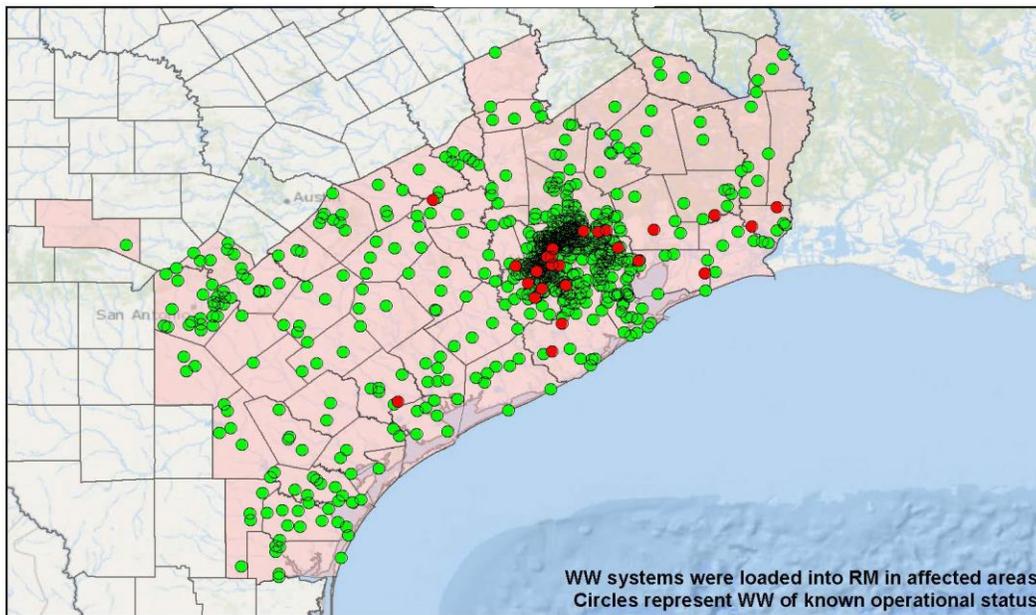
EPA is providing support to TCEQ for drinking water and wastewater system assessments. Ten EPA personnel are conducting drinking water assessments in the Houston Branch, five personnel are conducting wastewater assessments in the Houston Branch and one person is conducting drinking water assessments in the Port Arthur/Beaumont Branch.

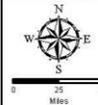
Drinking Water and Wastewater Assessments (September 8, 2017)		
Assessment Types	Daily Assessments	Total Assessments
On-Site DW Assessments	53	295
On-Site WW Assessments	26	193
Phone DW Assessments	331	4969
Phone WW Assessments	82	3017



<p>Legend</p> <ul style="list-style-type: none"> ● Water Outage ● Boiled Water Notice State Declared Counties 	<p>US EPA Region 6 Hurricane Harvey Response</p> <p>Drinking Water Status Map in Hurricane Harvey Affected Areas 0600 CDT 20170909</p>	 <p>For Official Use Only Printed via Web</p>	 <p>EPA GIS Printed: 1:03:54 AM 9/6/2017</p>
---	---	--	---

FILE F:\Mxdt\H_harvey\Harvey\DW_WW_Maps\dm\dm\Status_20170909.mxd 1:03:54 AM 9/6/2017 1/1/2017

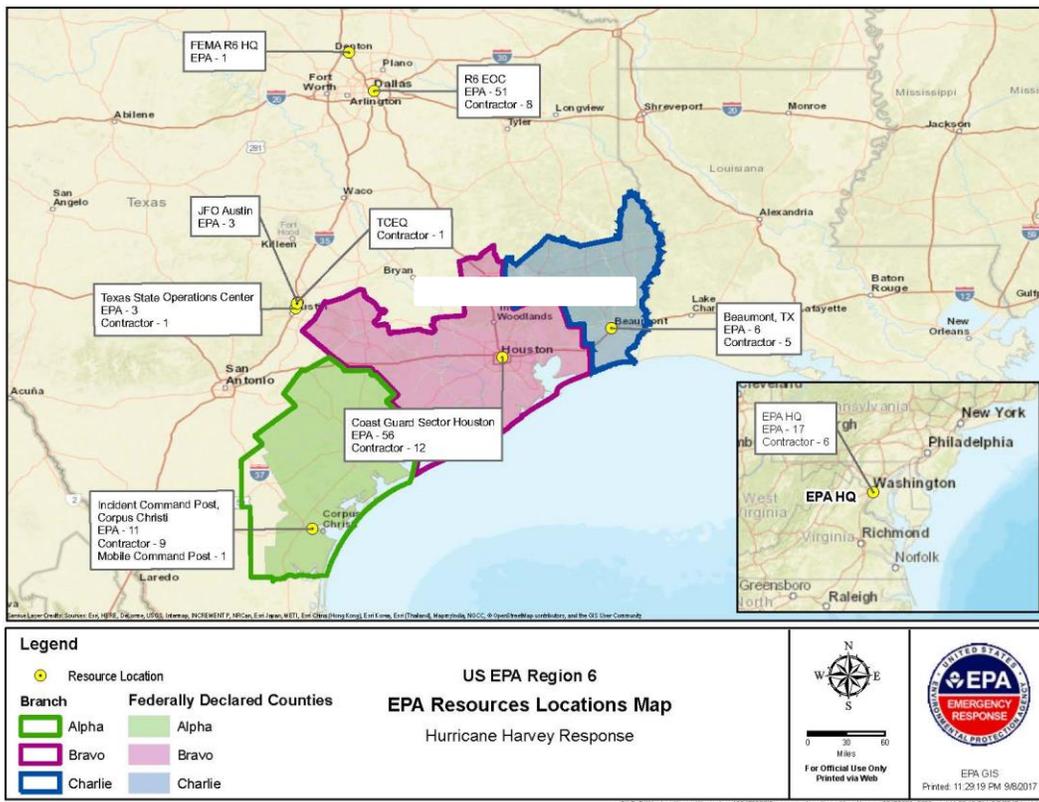


<p>Legend</p> <ul style="list-style-type: none"> ● Not Operational ● Operational State Declared Counties 	<p>US EPA Region 6 Hurricane Harvey Response</p> <p>Wastewater Status Map in Hurricane Harvey Declared Areas 0600 CDT 20170909</p>	 <p>For Official Use Only Printed via Web</p>	 <p>EPA GIS Printed: 12:25:31 AM 9/6/2017</p>
--	---	--	--

FILE F:\Mxdt\H_harvey\Harvey\DW_WW_Maps\dm\dm\WwStatus_20170909.mxd 12:25:31 AM 9/6/2017 1/1/2017

EPA RESOURCES

Personnel	EPA Dallas, TX	FEMA Denton, TX	Texas JFO Austin, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	Beaumont, TX	HQ EOC, Wash, DC	TOTAL
EPA	51	1	3	3	0	56	12	6	17	149
START	8			1	1	12	9	5		36
ERRS						16	8	3		27
Other Contractors	1								6	7
TOTAL	60	1	3	4	1	84	29	14	23	198



FUNDING

September 8, 2017, UPDATED 1300 hours

Funding Sources	Funding Ceiling	Funding Ceiling Less Indirect	Spent to Date	Remaining Balance	Daily Burn Rate	Days Remaining
Non Mission Assignment	N/A		\$64,200.00	\$0.00		
MA 4332DR-TX-EPA-01	\$275,000.00	\$242,741.00	\$24,816.00	\$217,925.00	\$2,848.00	76.52
MA 4332DR-TX-EPA-03	\$8,592,000.00	\$7,584,077.00	\$5,248,884.21	\$2,335,192.79	\$282,745.51	8.26
Totals:	\$8,867,000.00	\$7,826,818.00	\$5,337,900.21	\$2,553,117.79		

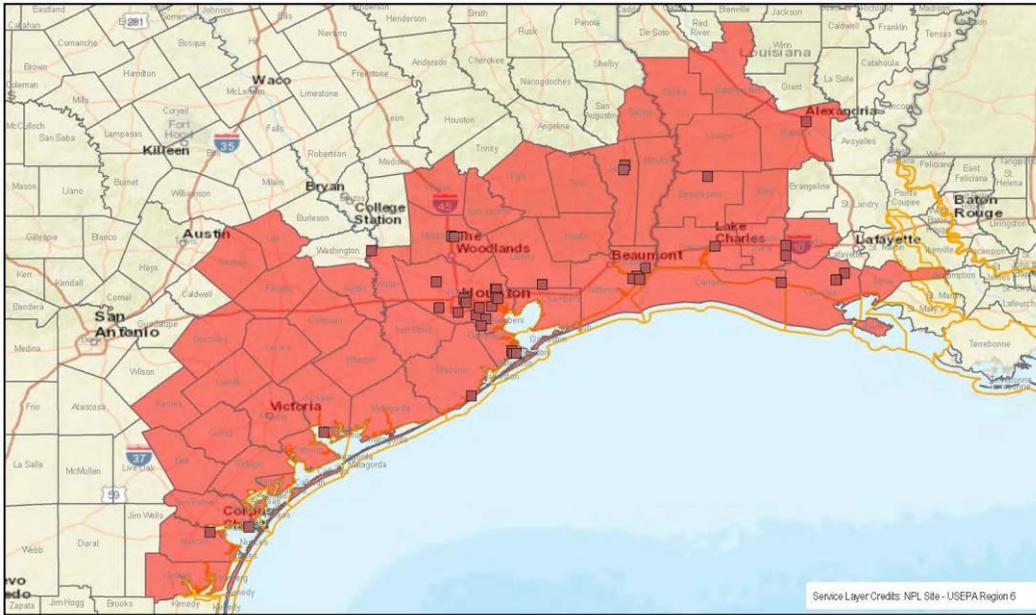
Indirect costs represent the money the Cincinnati Shared Service Center takes off the top to manage the Mission Assignments

REFINERIES/FUEL WAIVERS

- EPA has extended the current multi-state fuel waiver to September 26, 2017.
- EPA has granted all open fuel waivers requested to date.
- EPA has issued a No Action Assurance for the Use of Vapor Recovery Systems in Texas Related to Hurricane Harvey (September 1, 2017). EPA will exercise its discretion not to pursue enforcement for violations of the vapor recovery requirements for fuel loading and unloading under 40 CFR Part 60 Subpart XX and Part 63 Subparts, R, Y, CC, BBBB, and 30 Texas Administrative Code sections 115.212, .214.
- The Internal Revenue Service expanded the red dye fuel waiver to cover the entire state of Texas, not just the 110 counties as before.

FEDERAL SUPERFUND NPL SITES

- All 43 Federal Superfund NPL Sites in the affected area have been assessed. Of these, 41 sites have been cleared, and two sites (San Jacinto Pits and US Oil Recovery) require additional follow-up.
 - U.S. Oil Recovery Update: On September 7, 2017, a total of 16 vacuum truckloads of water (approximately 80,000 gallons) were removed and shipped off-site for disposal. The potentially responsible party continues operating pumping equipment and a storage tank to maintain and control overflow. Sampling of the lift station water continues. In addition, soil and ground water samples were collected on September 8, 2017. No sheen or odor was observed in the overflowing water.
 - San Jacinto Waste Pits Update: Cap repairs and underwater cap surveying continues at the San Jacinto Superfund Site. The EPA dive team is on-site and integrated in the cap survey efforts. Sampling of sediment and surface water was completed on September 7, 2017.
- On September 5, 2017, EPA initiated sampling at NPL sites in Texas. EPA will sample all 34 Texas NPL sites to confirm no releases. Sampling will be completed by September 11, 2017. Results will be delivered to the Region by September 14, 2017.



Legend

- NPL Sites (43)
- Coast Guard Area of Responsibility
- Federally Declared

US EPA Region 6
National Priority List (NPL) Sites
in Federally Declared Counties/Parishes



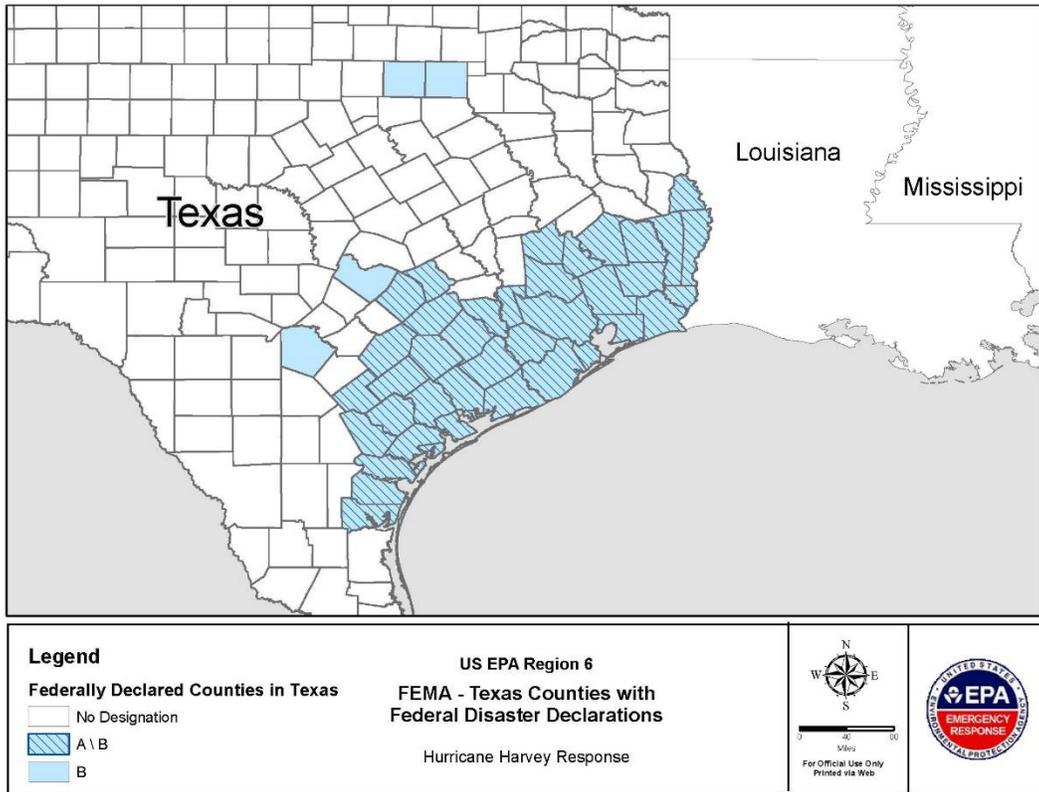
0 25 50
Miles

For Official Use Only
Printed via Web



FILE: C:\msdweb\www\pdm\20110807\PR_144_Site_Map_20110807_1400.mxd 12:42:12 PM 07/20/11 page 1

FEMA – TEXAS COUNTIES WITH DISASTER DECLARATIONS



F:\E:\C:\v\c\66\Harvey\p\2017\000\FEMA - Texas Fed Disaster Declarations 2017\000_1430 and 12 29 59 PM 10/2017.pptx

9/8/2017 FIELD ACTIVITIES

PHOTOS



Port Arthur/Beaumont Branch –
EPA On-Scene Coordinator (OSC) discusses operations with members of the U.S. Coast Guard



Bravo Branch – EPA preparing waste pad